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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

THOMPSON, MARC D

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 02/12/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/935,131

Applicant(s)

SCHWEITZER et al.

Examiner

Marc Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jul 9, 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-40 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 6) ☐ Other: _____

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DETAILED ACTION

1. This application has been examined.
2. Claims 20-40 are pending.

Priority

3. This application claims priority to currently pending application number 09/552,818, filed 4/20/2000, claiming priority to provisional application 60/141,351.
4. The effective filing date for the subject matter defined in the pending claims in this application is 6/28/1999.

Specification

5. The disclosure is objected to because of the following informalities:
 - a. Page 2 of the specification recites numerous related cases which do not specify a corresponding serial number for identification.

Appropriate correction is required.

Drawings

6. The Examiner contends that the submitted drawings are acceptable for examination.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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8. Claims 20-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. The claims, title, abstract, and specification use the term “session reconstruction” without providing adequate definition to determine the metes and bounds of what this limitation includes. Commensurate with the specification, the definition of “session” is relatively clear (Page 9, Lines 11-24), but the operation of the described “reconstruction system(s)” is vague and remains open to multiple interpretations when portraying functionality drawn to “session reconstruction”. Thus, the use of this limitation in the claims is held indefinite since the term does not directly impart any specifically defined behavior or functionality. For examination purposes, “session reconstruction” will be treated as the gathering of information about the session, and the analyzing of this gathered information in order to monitor or account a specific flow (session), or sets of flows (sessions), of network information. See, for example, present specification, Page 18, Line 11 through Page 20, Line 12.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 20-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu et al (U.S. Patent Number 5,101,402), hereinafter referred to as Chiu, in view of Ronen (U.S. Patent Number 5,845,267), hereinafter referred to as Ronen, further in view of Maccabee et al. (U.S. Patent Number 6,108,700), hereinafter referred to as Maccabee.

13. Chiu disclosed a system and method for real-time monitoring of software sessions by analyzing packets transmitted on the network using session identifiers in packets header(s), statistical gathering of session flow characteristics on the network, and preparation of gathered information in specific formats. See, inter alia, Abstract, Column 4, Line 59 through Column 5, Line 41, and Column 6, Lines 53 through Column 7, Line 14. The system of Chiu related to the claimed "session reconstruction" system, since both systems actively inspect, categorize, and account, based on application session flows. See Abstract.

14. While Chiu disclosed the invention substantially as claimed, Chiu did not expressly disclose identification of a user associated with an arbitrary application session, and the use of a predetermined policy to effect accounting, billing, filtering, application event detection, and/or report generation. Chiu kept statistics on individual sessions of network service usage. See

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Column 5, Lines 8-12. It was well known at the time of invention to charge users for the usage of network resources/services, and so, this would have motivated an artisan to search related arts for a compatible system which would have enabled the information gathered by the system of Chiu to have been utilized in combination with at least an electronic billing mechanism to ensure that users paid an appropriate, agreed amount, for a network service, and that such gathered data was accurate and reliable.

In the same art of network transaction monitoring, Ronen disclosed a system and method for billing users for network services using a session manager (a session reconstructor which gathered information about transactions during arbitrary session intervals). The session manager correlated the requesting network address to a user ID and an application ID. See Column 2, Lines 26-60. The system further utilized policy management for appropriate charging, filtering, and application/transaction event determining/monitoring. See, inter alia, Column 2, Lines 54-60.

Lastly, this combination of teachings remained silent as to specifics regarding granularity of transactions, that is, the correlation of events/states into a single atomic "transaction", or event (session). An artisan would have been motivated to search the same arts of events and transaction management to locate teachings dealing with compound sessions/transactions (Chiu, Column 1, Lines 44-51, Column 5, Lines 13-30, and Ronen, Column 7, Lines 6-33), accurate information gathering regarding these sessions (Chiu, Column 4, Lines 44-50), and report generation based on gathered information (Chiu, Column , Lines 8-12).

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In these arts, Maccabee disclosed a system which correlated and collated select measurement events into transactions for report generation. See Columns 3-6, for example. The system was disclosed as open-ended, able to permit the addition of software and/or hardware modules to extend the measurement and/or reporting facilities of the system. See Column 4, Lines 1-12. In short, the system of Maccabee would have enabled an ordinary artisan at the time of the invention to define event(s) as portions of a transaction for statistical gathering and reporting.

The combination of these teachings would have been obvious to one of ordinary skill in the art at the time of the invention, since all the teachings reside in the collection and monitoring of network transactional sessions. Chiu provided for monitoring sessions, Ronen provided for session and transaction billing, and Maccabee provided event notification for transactional session compilation. The resulting system comprises management, billing, and reporting policy enforcement, in an enhanced network monitoring environment, using arbitrary, atomic transactions and sessions.

15. The claimed limitations were disclosed by the combination of Chiu, Ronen, and Maccabee as follows:

(Claim 20,30)

a. *Receiving a plurality of packets at a plurality of analyzers*, was taught by Chiu, inter alia, in Column 11, Line 55 through Column 12, Line 14, and was taught by Maccabee in Figures 1B-1D.

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b. *Aggregating the plurality of packets*, was taught by Chiu in Column 12, Lines 15-28, was taught by Ronen in Column 7, Lines 6-15, and was taught by Maccabee in Column 9, Line 46 through Column 10, Line 4.

c. *Analyzing the plurality of packets to identify a plurality of flows*, was taught by Chiu in Column 5, Lines 23-25, was taught by Ronen in Column 2, Lines 26-41, and was taught by Maccabee in Column 4, Lines 47-67.

d. *Identifying a session associated with the flows*, was taught by Chiu in Column 5, Lines 27-30.

e. *Identifying at least one application associated with the session*, was taught by Chiu in Column 5, Lines 36-37.

f. *Reconstructing the session utilizing the identified application*, was taught by Chiu in Column 5, Lines 31-41.

g. *Identifying a user associated with the session*, was taught by Ronen in Column 2, Lines 44-51, and was taught by Maccabee in Column 4, Lines 63-67

h. *Determining a policy*, was taught by Chiu in Column 5, Lines 13-41, was taught by Ronen in Column 2, Lines 54-60, and was taught by Maccabee in Column 8, Lines 43-47.

i. *Billing the user for the session in accordance with the policy*, was taught by Ronen, inter alia, in Column 3, Lines 1-12 and Column 5, Lines 43-48.

(Claim 21,31)

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j. *Filtering the packets for removing packets unrelated to the session*, was taught by Chiu in Figure 15 (236, lower), where ignored/discarded packets were present (filtered), unrelated to the session(s) being analyzed. Also see Ronen, Column 4, Line 63 through Column 5, Line 10, and Maccabee, Column 2, Lines 7-25.

(Claim 22,32)

k. *Identifying application events associated with the session based on the policy*, was taught by Maccabee in Column 4, Lines 29-46, Column 5, Lines 4-60, and Column 8, Lines 27-57.

(Claim 23,33)

l. *Assigning a significance to the application events based on the policy*, was taught by Maccabee in Column 8, Lines 27-57.

(Claim 24,34)

m. *User is billed for the session utilizing the application events in accordance with the policy*, was taught by Ronen in Column 5, Line 20 through Column 8, Line 29, and was taught by Maccabee in Column 4, Lines 29-40.

(Claim 25,35)

n. *Further comprising determining billing information for the session using the application events in accordance with the policy*, was taught by Ronen in Column 5, Line 20 through Column 8, Line 29.

(Claim 26,36)

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o. *Outputting a report including the billing information in accordance with the policy*, was taught by Ronen in Column 7, Lines 6-33, and was taught by Maccabee in Column 10, Lines 1-4.

(Claim 27,37)

p. *Restricting tasks of the user in accordance with the policy*, was substantially taught by Ronen in Column 5, Line 55 through Column 6, Line 64. Since specific transactions were identified, rights and authorization of the user were used to determine any application usage, and disposition of the transaction occurred when the transaction was authorized, the provision for restricting tasks (application usage) for users was present, according to the policy which directly dictated which applications were billed to what, and who was authorized for each application use.

(Claim 28,38)

q. *An amount of bandwidth is restricted in accordance with the policy*, would have been obvious to one of ordinary skill in the art at the time the invention was made, since billing network usage according to an arbitrary assigned/designated bandwidth was well known in the art. A user policy was required to determine the usage status of an individual user. Designating a bandwidth usage limit within the policy applied to each user, and the cost associated with bandwidth usage, would have been routine.

(Claim 29,39)

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r. *Policy includes a series of packet capture language expressions and output selectors*, was inherent in the Chiu system, since programmed capture of network packets was utilized. Any machine actively analyzing network packets would have inherently included expressions and selectors for reading/writing packet headers.

(Claim 40)

s. *Identifying a session associated with a first flow*, was taught by Maccabee in Column 4, Lines 29-46, and Column 5, Lines 33-38.

t. *Identifying additional flows associated with the session*, was taught by Maccabee in Column 4, Lines 29-46, Column 5, Lines 33-38, and Column 9, Lines 46-55.

u. *Gathering application events associated with the session based on the policy*, was taught by Maccabee in Column 5, Lines 4-24.

(Claim 23/33, 25/35, 26/36, 27/37)

v. *Executing actions in response to the application events in accordance with the policy*, was taught by Maccabee in Column 13, Lines 9-16.

Since the claimed limitations were disclosed by the combination of Chiu, Ronen, and Maccabee, claims 20-40 are rejected.

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16. Claims 20-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCreery et al. (U.S. Patent Number 5,787,253), hereinafter referred to as McCreery, in view of Ronen (U.S. Patent Number 5,845,267), hereinafter referred to as Ronen.

17. McCreery disclosed a network packet analyzation system for obtaining transaction data related to session of network usage. See Column 2, Lines 11-49. McCreery further filtered data in packets to identify traffic flows (transactions in progress) and decode application level commands and events specified in the packets comprising the request/response. See Column 2, Line 50 through Column 3, Line 12.

Thus,

(Claim 20,30)

a. *Receiving a plurality of packets at a plurality of analyzers*, was taught by McCreery in Column 6, Lines 41-43.

b. *Aggregating the plurality of packets*, was taught by McCreery, inter alia, in Column 10, Lines 20-23.

c. *Analyzing the plurality of packets to identify a plurality of flows*, was taught by McCreery in Column 9, Lines 29-49.

d. *Identifying a session associated with the flows*, was taught by McCreery in Column 9, Lines 37-39.

e. *Identifying at least one application associated with the session*, was taught by McCreery in Column 5, Lines 1-10.

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f. *Reconstructing the session utilizing the identified application*, was taught by McCreery in Column 11, Lines 15-26, and Column 13, Lines 43-65.

g. *Identifying a user associated with the session*, was taught by McCreery in Column 12, Lines 39-59.

While McCreery disclosed the invention substantially as claimed, McCreery did not expressly disclose billing specific customers for session oriented transactions. While McCreery did expressly disclose transactions and services available on an internet, McCreery failed to address billing for these services/transactions during description of the system. An ordinary artisan at the time of invention would have been motivated to search for teachings which would allow an administrator to allow charging for service and usage of the applicable network(s). This would allow suitable paying/billing arrangements to compensate network service providers for allowing client(s) to use services on the network.

In this art of network transactional billing, Ronen disclosed charging actual users associated with terminal addresses for accurate billing for the usage of network services. See Column 2, Lines 26-67, Column 3, Lines 1-12, and Column 5, Lines 20-54. Ronen disclosed a modification to the McCreery system which would not have disrupted the functionality of the McCreery system, as well as being modularly added to any existing system. See Column 3, Line 61 through Column 4, Line 62, and Column 7, Lines 34-43. Thus,

h. *Determining a policy*, was taught by McCreery in Column 3, Lines 1-12, and was taught by Ronen in Column 2, Lines 54-60

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i. *Billing the user for the session in accordance with the policy*, was taught by Ronen, inter alia, in Column 3, Lines 1-12 and Column 5, Lines 43-48.

(Claim 21,31)

j. *Filtering the packets for removing packets unrelated to the session*, was taught by McCreery, inter alia, in Column 8, Lines 24-65. Also see Column 10, Lines 38-40.

(Claim 22,32)

k. *Identifying application events associated with the session based on the policy*, was taught by McCreery in Column 3, Lines 1-12, and Column 5, Lines 1-10.

(Claim 23,33)

l. *Assigning a significance to the application events based on the policy*, was taught by McCreery in Column 5, Lines 1-10.

(Claim 24,34)

m. *User is billed for the session utilizing the application events in accordance with the policy*, was taught by the combination of McCreery in Column , Lines , and Ronen, Column 5, Line 20 through Column 8, Line 29.

(Claim 25,35)

n. *Further comprising determining billing information for the session using the application events in accordance with the policy*, was taught by the transaction gathering provided by McCreery in combination with Ronen, Column 8, Lines 10-29.

(Claim 26,36)

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o. *Outputting a report including the billing information in accordance with the policy*, was taught by McCreery in Column 5, Lines 31-43, and Column 7, Lines 60-67, and would have been obvious to an ordinary artisan working with the Ronen system, since this limitation would have minimally entailed reporting all the information stored with a particular user account, e.g., an itemized billing statement. See Ronen, Column 6, Lines 10-50.

(Claim 27,37)

p. *Restricting tasks of the user in accordance with the policy*, was taught by McCreery in Column 5, Lines 44-57, and was taught by Ronen in Column 5, Lines 46-50, and Column 8, Lines 1-10.

(Claim 28,38)

q. *An amount of bandwidth is restricted in accordance with the policy*, was taught by McCreery in Column 5, Lines 44-57.

(Claim 29,39)

r. *Policy includes a series of packet capture language expressions and output selectors*, was taught by McCreery in Column 4, Line 35 through Column 5, Line 10, and Column 9, Lines 29-49.

(Claim 40)

s. *Identifying a session associated with a first flow*, was taught by McCreery, inter alia, in Column 2, Lines 50-67.

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t. *Identifying additional flows associated with the session*, was taught by McCreery in Column 9, Lines 29-67.

u. *Gathering application events associated with the session based on the policy*, was taught by McCreery in Column 5, Lines 1-10, and was taught by Ronen in Column 7, Lines 6-33.

(Claim 23/33, 25/35, 26/36, 27/37)

v. *Executing actions in response to the application events in accordance with the policy*, was taught by McCreery in Column 8, Lines 1-9, and was taught by Ronen in Column 7, Lines 24-27.

It would have been obvious to one of ordinary art at the time the invention was made to modify the transaction tracking system of McCreery with the transaction billing system set forth by Ronen in order to bill particular users for usage of network services.

Since the combination of McCreery and Ronen disclose the claimed invention limitations, claims 20-40 are rejected.

18. Claims 20-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over “Rich Data About customer Usage” (Narus’ semantic traffic analysis), written by Bill Roberts for Internet World, v5, n10, p27, published 3/15/1999, hereinafter referred to as Roberts, in view of “Narus and Portal Join to Provide Internet service Providers Full Customer Management and Billing

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Solutions; Alliance creates Solution Suites for ISPs to Build Service-Driven Businesses”, Business Wire, 3/16/1999, hereinafter referred to as Business Wire.

19. Roberts disclosed “semantic traffic analysis” which allowed an ISP to capture and analyze (“sniff”) packets in order to gather information about application level and customer usage of the network, including IP telephony, e-mail, application usage, multimedia streaming, and any other IP service. The system was equipped to track user behavior during sessions. The system further allowed customers to receive “billing information that’s as specific as a telephone bill”, i.e., itemized. Thus, Roberts disclosed reception of packets on the network, analyzing the packets and flows to identify sessions, identification of application(s) associated with the session, and identification of the user associated with the session. Policy determination was implicitly disclosed, since customers were billed a determined amount in exchange for services. Billing the user in accordance with this policy was disclosed, since the system offered itemized, discrete billing information. Thus, generation of reports including billing information were also disclosed. Filtering of packets unrelated to the session was inherent, since discerning of the session itself provided this. In short, the system “measure customers’ usage of applications and charge[d] them appropriately”, by “sniff[ing] network traffic”, using “[a] number of probes required [depending] on the size and geographical reach of the network.”

An artisan working with the Roberts (Narus) system would have been motivated to search for further teachings in the same art, dealing directly with this system and the underlying technology. In these arts, Business Wire disclosed an alliance between Narus and Portal, which

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resulted in “comprehensive and flexible customer management and billing solutions” which “capture[d] real-time, comprehensive network and application-level customer usage information directly from IP networks” by “capturing all customer usage activity.” Thus, provision for packet analyzing, session reconstruction, identification of particular applications/services, billing for application events according to a general policy, and output of reports including the billing information were all disclosed.

The claimed invention was described by the general teachings set forth in Roberts and Business Wire, and an ordinary artisan would have been able to construct the claimed invention from these teachings without undue experimentation. Thus, since the claimed invention was disclosed, claims 20-40 are rejected.

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Conclusion

20. As a general matter, not only the specific teachings of a reference but also reasonable inferences which an artisan would have logically drawn therefrom may be properly evaluated in formulating a rejection. *In re Preda*, 401 F.2d 825, 159 USPQ 342 (CCPA 1968) and *In re Sherpard*, 319 F.2d 194, 138 USPQ 148 (CCPA 1963). Skill in the art is presumed. *In re Sovish*, 769 F.2d 738, 226 USPQ 771 (Fed. Cir. 1985). Furthermore, artisans must be presumed to know something about the art apart from what the references disclose. *In re Jacoby*, 309 F.2d 738, 226 USPQ 317 (CCPA 1962). The conclusion of obviousness may be made from common knowledge and common sense of a person of ordinary skill in the art without any specific hint or suggestion in a particular reference. *In re Bozek*, 416 F.2d 738, 1385 USPQ 545 (CCPA 1969). Every reference relies to some extent on knowledge of persons skilled in the art to complement that which is disclosed therein. *In re Bode*, 550 F.2d 656, 193 USPQ 545 (CCPA 1977). The above rejections assume ordinary knowledge and well known functionality in the field of computer networking. Motivation for obtaining and incorporating related technologies, and resulting modification(s) of any/all disclosed subject matter in the above rejections would have been reasonable to one of ordinary skill in the art at the time the invention was made.

21. Applicant employs broad language which includes the use of words and phrases which have broad meanings in the art, inter alia, “flows”, “session”, “policy”, and “events”. It is suggested that Applicant argues narrower interpretation of the claim language, or amends the claims significantly enough to construe a narrower meaning to the limitations. As the claims

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breadth allows multiple interpretations and meanings which are broader than Applicant's disclosure, the Examiner is forced to interpret the claim limitations as broadly as reasonably possible, in determining patentability of the disclosed invention.

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. "Serving Up QoS End-to-End", by Marguerite Reardon, Data Communications, November 1998, pages 25-27, disclosed application layer monitoring which dynamically adjusts traffic policies in response to changing network conditions.

b. "NARUS Intelligence", February 1999, disclosed further detail and functionality of the NARUS Semantic Traffic Analysis infrastructure.

c. Sanders et al. (U.S. Patent Number 5,563,879) disclosed reconstruction of network packetized messages.

d. Thandani et al. (U.S. Patent Number 5,648,965) disclosed packet filtering and analysis.

e. Wenig et al. (U.S. Patent Number 6,286,030) disclosed session reconstruction.

23. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Marc Thompson whose telephone number is (703) 308-6750. The Examiner can normally be reached on Monday-Friday from 9am to 4pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Mark Powell, can be reached at (703) 305-9703.

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The fax phone numbers for the organization where this application is assigned are as follows:

(703) 746-7238	(After Final Communications only)
(703) 746-7239	(Official Communications)
(703) 746-7240	(for Official Status Inquiries, Draft Communications only)

Inquiries of a general nature relating to the general status of this application or proceeding should be directed to the 2100 Group receptionist whose telephone number is (703) 305-3900, or Customer Service for Technology Center 2100 at (703) 306-5631.

MARC THOMPSON
Marc D. Thompson
Patent Examiner
Art Unit 2142